GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:3764
ANSWERED ON:16.08.2000
ICAR REPORT ON AGRICULTURAL LAND
RAGHUVANSH PRASAD SINGH

Will the Minister of AGRICULTURE be pleased to state:

(a) whether the agricultural lands are becoming deficient in micro-nutrients, soil health has degraded, moisture holding capacities have drastically been affected, even according to ICAR report for Punjab and Haryana;

(b) whether energy balance in agriculture has been disturbed and inspite to more and more of inputs productivity is declining;

(c) whether Canadian studies reveal that in modern system of agriculture energy input of non-renewable resources is 10, whereas output is only 1, what studies in this regard have been made on use of energy and water per kg. of wheat, rice, maize, sugarcane and others;

(d) the programme proposed to ractify imbalance of energy, micro nutrients, soil health and moisture retention capacity; and

(e) since problems of small and medium farmers are quite-different, is there any programme for research suited to them?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. DEBENDRA PRADHAN)

(a) Yes, Sir.

(b) No, Sir. The requirement of energy for agricultural operations is going up. But, use of more inputs has not resulted in decline in productivity, barring few exceptions.

(c) Council is not aware of such Canadian studies.

The average energy requirement per kg of crop production is under :

Crop	Energy requirement (MJ)
Wheat	4.3-5.1
Rice	3.0-6.7
Maize	8.0-10
Sugarcane	1.2-3.0
(Plant)	
Mustard	8.2-9.3
Groundnut	5.7-12.2
Potato	2.2-5.5
Soybean	5.2-6.5
Pigeon Pea	4.0-5.0
Green Gram	6.0-8.0

The water requirement of wheat, rice, maize & sugarcane generally varies from 20-30, 75-120, 40-60 and 100-150 cm, respectively.

(d) New methods of commercial energy and proper supplementation and substitution with new and renewable resources of energy are being developed to reduce dependence of commercial energies.

Integrated use of farm yard manure, compost, green manures and bio-fertilisers with inorganic fertilizers and inclusion of legumes in the crop rotations are being advocated to restore soil micro nutrient status, soil health and moisture retention capacity.

(e) On farm research programme are being taken up in mission mode ensuring greater participation of farming community using low cost technology and locally available resources.